

# **Dynamic Cross Flow Filtration with Ceramic Membranes**

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During the last years there was a development from the conventional cross flow filtration to the dynamic filtration. The advantages of the dynamic filtration (rotation filtration) are the highly improved cleaning effect on the filter surface together with a reduced energy consumption. In combination with ceramic filter elements new application can be realised.

The basis for a continuous filtration process is the prevention of a membrane fouling respectively the prevention of a cake layer on the membrane surface. A permanent cleaning of the filter surface during the process is necessary. This is achieved by dynamic cross flow techniques, in which the filter surface is permanently tangentially overflowed. The rotation of filter discs is generating shear forces to prevent the development of a filter cake.

As a result of the well-known outstanding material properties of ceramics in combination with the new processes of the rotation filtration new chances and markets arise for the plant engineering. At the moment a variety of different dynamic filtration plant are available. Based on these plants solutions for a lot of applications were developed.